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How to Choose an Irrigation Consultant

Presented here are some guidelines and criteria to aid in the selection process for irrigation management assistance.

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The complexity of agricultural technology makes it difficult for the farmer to apply this technology on a day-by-day basis. Refinement and application of agricultural technology in the field has generally been through industrial representatives and federal and state extension programs.

Many private agricultural organizations have done an excellent job in transferring new technologies to the consumer. Farm management has begun to realize that relying entirely on industry for technological information is no longer adequate. Also, a potential conflict of interest exists when industry representatives provide technical advice and at the same time are expected to sell a product. Many farm managers have recognized this conflict and are seeking professional consultants for farm management recommendations.

Irrigation scheduling, a technology in demand by farmers, may be provided by commercial consulting services. The selection and evaluation of an irrigation management consultant is a dilemma facing many farm managers. Presented here are some guidelines and criteria to aid in the selection process for irrigation management assistance.

One of the key factors is the technical qualifications of the consultant. The first qualification to look for is experience and competency in the irrigation area. The consultant must have both educational and practical knowledge of irrigation system operation and management. It is highly desirable that the individual have college level training in several of the following disciplines: irrigation methods, irrigation engineering, agronomy, soil chemistry, soil physics, climatology, plant physiology, entomology and economics. It is preferable that the consultant have a B.S. degree in either agronomy, soils, or engineering. Field experience is essential for the consultant and/or his staff, and a farming background is a valuable asset. Many service organizations have at least one staff member skilled in each of these disciplines.

The advent of computer irrigation scheduling has resulted in some activity by consultants who, while computer experts, have little training, knowledge or experience in irrigationd farm management. The computer is only a tool that can aid a properly trained consultant. It will not make computer operators experts in irrigation management.

The cost of any consulting service is highly dependent on the level and types of services being furnished. Many consulting services not only furnish irrigation scheduling, but also make recommendations for

fertilizers, weed control and insect control. They may also make recommendations as to proper stream size and length of run for surface irrigation systems, and for operating pressures, sprinkler selection, and operating times for sprinkler systems. When selecting a management service, one should insist on a written contract detailing the types of services to be provided and the fees for these services. The following are some of the services which may be provided by an irrigation management organization.

1. An evaluation of irrigation system performance and effectiveness to accurately determine both gross and net irrigation application.
2. Periodic irrigation schedules with recommended frequencies and amounts of irrigation water to apply. Computer-based irrigation scheduling recommendations should be fully supported with field measurements of soils, climatic or evaporation information, and irrigation and plant data.
3. Periodic field visits to your irrigationd fields during which the technician will monitor soil moisture with either soil probes, moisture blocks, tensiometers, or other methods. If periodic field visits are not made, it is absolutely essential that some feedback on rainfall and irrigation or sensed soil water be included in a scheduling program.
4. Recommendations for fertility, weed control, and insect control as staff expertise permits. Many consultants will assist in the calibration of chemicals and will recommend safety practices for their application.
5. Recommendations relative to proper stream size, set time and length of run for surface irrigation systems. Recommended operating pressure, sprinkler selection, and operating times should be given for sprinkler systems. If trickle irrigation systems are used, recommendations should also be given for operating times and pressures.
6. An end-of-season summary report which reviews the client's irrigation program relative to the service's recommendations.

It is highly unlikely that one individual would possess the capabilities for providing recommendations in all areas of irrigationd crop production. However, if the consulting management company has the expertise, the firm can keep abreast of current technology and give adequate recommendations in a number of disciplines. Most competent management consulting firms will not sell, or receive a commission on, any product they recommend, thereby avoiding a conflict of interest. A discussion with existing clients of a firm and their degree of satisfaction with it would be a good source of information when selecting a consultant service.

The selection of a good consulting service may be difficult; however, increased production and/or decreased operating costs can be the best criteria by which it can be evaluated. The use of a professional consulting service may be the only way of using the best technology available in an agricultural operation.

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